REMARKS

Applicants appreciate the courtesy shown by the Examiner in discussing this case with the undersigned and Yuhgo Maruta, a representative of the Applicants, on April 23, 2010. The discussions of the interview are reflected in the above amendments and the following remarks.

Reconsideration is requested in view of the above amendments and the following remarks. Claims 1, 10 and 13-18 have been revised. Support for the revisions can be found at, e.g., Fig. 5, among other places. Claims 1-6 and 8-18 remain pending in the application.

Claim Rejections – 35 USC § 112

Claims 1-6 and 8-18 are rejected under 35 USC 112, first paragraph, as failing to comply with the written description requirement. Applicants respectfully traverse the rejection.

Claim 1 recites "after receiving the exiting signal, judging whether there is command relevance between the new command to be inserted and an old command to exit, if no, when the old command is in the last cycle of the pipeline, inserting the new command into the pipeline." That is, the new command is not inserted to the pipeline immediately after the exiting signal is received. On the other hand, the Fig. 5 and the accompanying text in the specification provide "the new Command G is inserted at No. 1 pipeline stage, thus the pipeline exiting signal of the old Command A is released at the fifth stage of the one pipeline period before, and when the Command A to exit flows to the sixth stage pipeline, the command is added with judgment logic to determine whether or not to insert the new Command G" (see, e.g., page 6, lines 24-30 of the specification, among other places). That is, Fig. 5 illustrates that a new command is not inserted into the pipeline immediately after the exiting signal is received. Instead, Fig. 5 shows that the new command is inserted into the pipeline after the judgment of whether there is command relevancy between the new command to be inserted and the old command to exit is performed. Therefore, claim 1 is described adequately in the specification.

Claims 1-6 and 8-18 are supported by the original disclosure and the rejection should be withdrawn.

Claim 4 is rejected under 35 USC 112, second paragraph, as being indefinite. Applicants respectfully traverse the rejection. Claim 1 requires an exiting signal being sent during a pipeline period immediately before a last cycle of the command exiting the pipeline, instead of being sent only one stage before the new command enters the pipeline. Further, as discussed in the above paragraph, claim 1 indicates that new command is not inserted into the pipeline immediately after the exiting signal is received. Thus, the description about "the exiting signal is released two stages before the new command enters the pipeline segment" in claim 4 is consistent with claim 1 and definite. Withdrawal of the rejection is respectfully requested.

Claim Rejections – 35 USC § 102

Claims 1, 4-6, 8-10 and 15-18 are rejected under 35 USC § 102(b) as being anticipated by Computer Organization and Design (hereinafter referred to as "Hennessy"). Applicants respectfully traverse this rejection.

Claim 1 has been revised to include when the old command is in the last cycle of the pipeline, inserting the new command into the pipeline, wherein the new command is sent to the same pipeline stage as the old command.

Hennessy fails to teach or suggest this process as recited in claim 1. Instead, Hennessy merely discusses inserting at least one bubble into a pipeline when there is a conflict between an old instruction and a new instruction (see Hennessy, pages 489-91), and, as a result, bubbles may appear in the pipeline. That is, the focus of Hennessy is on inserting bubbles, rather than removing bubbles. Hennessy is completely silent as to when the old command is in the last cycle of the pipeline, inserting the new command into the pipeline, wherein the new command is sent to the same pipeline stage as the old command as recited in claim 1,

For at least these reasons, claim 1 is patentable over Hennessy. Claims 4-6 and 8-9 depend from claim 1 and are patentable along with claim 1 and need not be separately

distinguished at this time. Applicants are not conceding the relevance of the rejection to the remaining features of the rejected claims.

Claims 10 and 15-18 depend ultimately from claim 1 and are patentable along with claim 1. In addition, Applicants submit that claims 10 and 15-18 are each independently patentable. The features of claims 10 and 15-18, for example, wherein the command processing unit sends a new command to the same pipeline stage as an old command when an exiting signal of the old command is received, or there is not command relevance between the new command and the old command, and the old command is in the last cycle of the pipeline, are not seen in or suggested by the references of record. Applicants are not conceding the relevance of the rejection to the remaining features of the rejected claims.

Claim Rejections – 35 USC § 103

Claims 2, 3 and 11-14 are rejected under 35 USC 103(a) as being unpatentable over Hennessy, and further in view of US 5084814 to Vaglica. Applicants respectfully traverse this rejection.

Claims 2-3 and 11-12 depend ultimately from claim 1 and are patentable over Hennessy in view of Vaglica for at least the same reasons discussed above regarding claims 1, 4-6, 8-10 and 15-18. Vaglica does not remedy the deficiencies of Hennessy. Applicants are not conceding the relevance of the rejection to the remaining features of the rejected claim.

Likewise, claims 13 and 14 depend ultimately from claim 1 and are patentable over Hennessy in view of Vaglica for at least the same reasons discussed above regarding claims 1, 4-6, 8-10 and 15-18. Vaglica does not remedy the deficiencies of Hennessy. In addition, Applicants submit that claims 13 and 14 are each independently patentable. The features of claims 13 and 14, for example, wherein the command processing unit sends a new command to the same pipeline stage as an old command when an exiting signal of the old command is received, or there is not command relevance between the new command and the old command, and the old command is in the last cycle of the

Serial No.: 10/586,016
Examiner: Robert E. Fennema
Reply to Office Action Mailed April 27, 2010
Page 12 of 12

pipeline, are not seen in or suggested by the references of record. Applicants are not conceding the relevance of the rejection to the remaining features of the rejected claims.

In view of the above, favorable reconsideration in the form of a notice of allowance is respectfully requested. Any questions regarding this communication can be directed to the undersigned attorney, Rong Yang, Limited Recognition No. L0279, at (612) 455-3816.
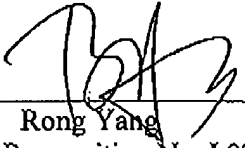
Respectfully submitted,

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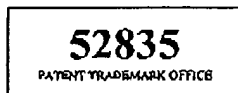
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